

State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

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January 8, 2003 Letter of Deficiency DAM #075.04

Mr. Stuart Hutchins 1027 Bishops Ledge Road Santa Fe, NM 87501

RE: Huckins Mill Pond Dam, Effingham

Dear Mr. Hutchins:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on August 28, 2002. During this visual inspection and/or file review, the following deficiencies were observed:

There is severe concrete deterioration on the upstream face of both right and left abutments, approximately located at the normal water elevation. Deterioration is sever enough that rebar is exposed;

- 2. There is concrete deterioration on the downstream end of the right concrete abutment, as well as on the inside of the right concrete abutment. This deterioration is likely caused by the stoplog bay tailwater;
- 3. There is concrete deterioration on the downstream end of the left concrete abutment, as well as at the area near the contact of the training wall with the flashboards;
- 4. Both the left and right earthen embankment sections were eroded and uneven:
- 5. The flashboards are not properly installed. Flash pins are dangerously too long. Without properly installed flashboards, this can reduce the maximum discharge capacity from 1,390 cfs to 990 cfs, no longer allowing the 50-year storm to safely pass;
- 6. There were 5 trees (a clump of 4 and a single) located adjacent to the downstream end of the right spillway training wall; and
- 7. There is no operation and maintenance plan (O&M) on file with the DES.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

July 31, 2003:

1. Repair the concrete deterioration on the upstream face of both right and left abutments, approximately located at the normal water elevation;

http://www.state.nh.us TDD Access: Relay NH 1-800-735-2964

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- 2. Repair the concrete deterioration on the downstream end of the right concrete abutment, as well as on the inside of the right concrete abutment;
- 3 Repair the concrete deterioration on the downstream end of the left concrete abutment, as well as at the area near the contact of the training wall with the flashboards;
- 4. Bring earthen embankment sections even with the top of the concrete abutments and establish a vegetative cover to prevent future erosion;
- 5. Install the flashboards as designed and trim or replace pins and boards if necessary;
- 6. Remove the trees from the downstream right earthen embankment;
- 7 Prepare and submit to the DES a written O&M plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel; and

Continuously Monitor:

8. Monitor the seepage visible at the downstream ends of both spillway-training walls. Should this seepage noticeably increase, notify DES immediately.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

Amy C. Clark, P.E. Dam Safety Engineer

Attachments Guideline for an O&M plan, DB8, DB13

cc: Gretchen Rule

ACC/was/h:/safety/wendy/lod/075-04lod.doc